

Title (en)  
METHODS OF FORMING PATTERNS ON SUBSTRATES

Title (de)  
VERFAHREN ZUM FORMEN VON MUSTERN AUF SUBSTRATEN

Title (fr)  
PROCÉDÉS POUR FORMER DES MOTIFS SUR DES SUBSTRATS

Publication  
**EP 2412004 B1 20180110 (EN)**

Application  
**EP 10756541 A 20100226**

Priority  
• US 2010025495 W 20100226  
• US 40930809 A 20090323

Abstract (en)  
[origin: US2010239983A1] A method of forming a pattern on a substrate includes forming spaced first features over a substrate. The spaced first features have opposing lateral sidewalls. Material is formed onto the opposing lateral sidewalls of the spaced first features. That portion of such material which is received against each of the opposing lateral sidewalls is of different composition from composition of each of the opposing lateral sidewalls. At least one of such portion of the material and the spaced first features is densified to move the at least one laterally away from the other of the at least one to form a void space between each of the opposing lateral sidewalls and such portion of the material.

IPC 8 full level  
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CPC (source: EP KR US)  
**G03F 7/0035** (2013.01 - EP KR US); **G03F 7/26** (2013.01 - KR); **H01L 21/0274** (2013.01 - KR)

Citation (examination)  
TOYOSHIMA T ET AL: "0.1 /spl mu/m level contact hole pattern formation with KrF lithography by resolution enhancement lithography assisted by chemical shrink (RELACS)", IEEE, IEEE, USA, 6 December 1998 (1998-12-06), pages 333 - 336, XP032387024, ISBN: 978-0-7803-4774-8, DOI: 10.1109/IEDM.1998.746367

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US9653315B2; US10151981B2; US9761457B2; US11335563B2

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